

# SYMBOL

### OWNER'S MANUAL

DESIGNED BY NEIL PATEL FOR AVALON ACOUSTICS



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This product is certified to meet the requirements of the European Union (EU) Electromagnetic Compatibility (EMC) Directive (89/336/EEC). Because the permanent magnets attached to the loudspeaker drivers produce magnetic fields, it is recommended that the product not be positioned in very close proximity to computer monitors or television sets.



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### 1 Introduction

The Avalon MultiChannel System SYMBOL reflects our passion for creating loudspeakers that capture the imagination, and accurately reproduce the three-dimensional space of modern film soundtracks as well as discreet multi-channel musical recordings.

Drawing upon our many years of experience in loudspeaker research, design, listening, and manufacturing, and combining the most powerful tools of modern technology with master craftsmanship of the finest artisans, we have created an unsurpassed holistic system.

The SYMBOL is a two-way design, utilizing a unique high-definition tweeter and an exclusive ceramic-coated woofer. Benefiting from our proprietary driver/cabinet alignment The SYMBOL achieves precise and detailed upper frequencies with superb low frequency support that is smooth and evenly dispersed. Careful control of polar response characteristics allows The SYMBOL to be used in both a two-channel and theater configuration.

#### www.avalonacoustics.com

### 2 Unpacking Instructions

#### Introduction

Your Avalon MultiChannel Systems loudspeakers were shipped in heavily padded cardboard containers to ensure their safe arrival. It is recommended to save these containers for possible future use.

#### Contents

The outer shipping box contains the two inner loudspeaker containers and an accessory box containing the upper grille assemblies, the owner's manual, and the mounting feet with spikes and hardware.

Avalon MultiChannel Systems loudspeakers are carefully matched in pairs for sonic performance and aesthetics. All matched pairs are sequentially serial numbered, and the lower of the two serial numbers is even. For example, serial numbers M00024 and M00025 are a matched pair. Please check the serial numbers on the end of your shipping boxes or on the bottom of the loudspeakers to insure that you have received a matched pair.

Note: Matched pairs of loudspeakers are sequentially serialized, with the lower of the two numbers as even. Contact your dealer immediately if you have NOT received a matched pair.

#### Opening the Loudspeaker Containers

Carefully cut the packing tape on the BOTTOM ONLY, open the flaps to the container and stand upright. Lift the container off of the loudspeakers vertically; the speakers stand upon protective foam padding.

Next, gently lay the speaker upon a soft cloth or towel. Install the mounting feet in this position. It is recommended to wait before installing the spikes in the feet, as they can make final placement difficult and can damage your floor. Please refer to Figure 2.1.

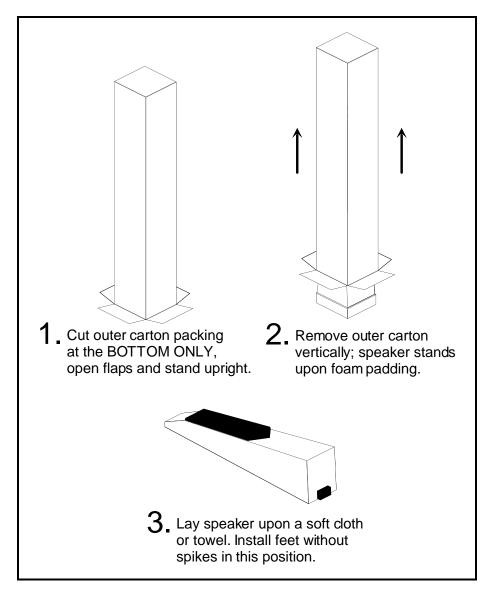


Figure 2.1 – Unpacking the loudspeakers.

#### Installing the Upper Grilles

The upper grille assemblies are contained within the accessory box (the lower grilles are shipped in their installed positions). The grilles are installed with friction fasteners and press into place on the speaker cabinets.

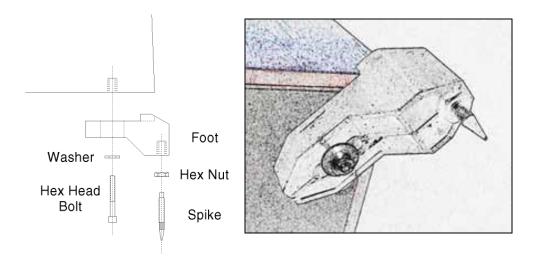
#### Orientation of the Felt Anti-Diffraction Mask

The grille assembly includes a felt anti-diffraction mask. Should the felt mask be removed, be sure to note the correct inside-outside orientation when re-installing it. The tweeter and midrange openings are beveled on the side that faces the listener (away from the speaker).

#### Installing the Mounting Feet Spikes

The mounting feet spikes provide for the ultimate coupling of your loudspeakers to the floor. It is recommend that the spikes be installed only after you have selected a suitable location for your loudspeakers, as positioning adjustments become more difficult once the spikes are installed.

To install the spikes, simply thread them into the mounting feet, and fix them in place with the supplied threaded nuts. You may also make small leveling adjustments for your floor by raising or lowering one or more of the spikes.



### 3 Wiring Instructions

#### Introduction

The crossover is contained in a non-accessible chamber in the bottom of the speaker cabinet. The SYMBOL is equipped with high-quality barrier terminals for connecting the speaker cables. Ring terminals or spade lugs designed for #10 screws are recommended for cable termination.

#### Connecting the Speaker to the Amplifier

1. Place the speaker in its approximate location, then lay the speaker on its side, using a soft surface to avoid scratching the finish.

2. Connect the speaker wires to the terminal block on the speaker bottom (see Figure 3.1). Check to insure the correct polarity (positive lead connected to the (+) terminal and negative lead connected to the (-) terminal.

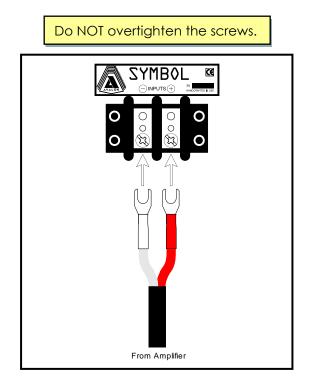


Figure 3.1 - Bottom view of the speakers showing the connections from the amplifier to the loudspeaker. Check to insure the correct polarity (positive lead connected to the (+) terminal and negative lead connected to the (-) terminal.

3. Stand the speakers up.

### 4 Break-in Period

Your new Avalon MultiChannel Systems loudspeakers have an initial break-in period. They will not perform to their full sonic potential when first installed in your system. This is partially due to a residual polarization of the dielectric materials used in the crossover capacitors and internal wiring.<sup>1</sup> As music is played through the loudspeakers, the electrical signal will gradually anneal these materials. Similarly, the suspensions of the drivers will reach their optimal mechanical properties as the speakers are played. Only after the break-in period will the full performance of your Avalon MultiChannel Systems loudspeakers be realized.

The break-in process will occur naturally as music is played through the system. To reduce the time required, it is recommended that the system be played continuously, using either a digital source in the repeat mode or an FM broadcast signal. The recommended break-in procedure is as follows:

- Initial warm-up: three to six hours of quiet music.
- Extended break-in: 100 to 150 hours of loud and dynamic source material (e.g. Tangerine Dream, Optical Race, RCA 2042-2-P).

During the break-in period, the sonic properties of your loudspeakers may undergo several gradual shifts as the various components break-in at different rates. It is therefore suggested that the fine-tuning of the system be delayed until after the break-in period is completed. However, during the final phases of the break-in period, the sonic image will open up, the sound-stage will gain specificity, the bass control and impact will increase, and the overall sound will have a more relaxed, involving presentation.

<sup>&</sup>lt;sup>1</sup> A high-voltage test is applied to wiring and capacitors during their manufacture. This results in a residual polarization of the dielectric materials.

### 5 Maximizing Two Channel Performance

These details are imperative to obtaining optimum results from your AVALON MUTLICHANNEL SYSTEMS loudspeakers.

#### Break-in

The break-in period is critical to maximizing sonic performance and should take place before other adjustments (see the discussion on page 8). The break-in should begin with three to six hours of quiet music, followed by 100 to 150 hours of loud and dynamic source material.

#### **Grille Assemblies**

The grille assemblies, with their felt anti-diffraction masks, are integral elements of the loudspeakers' design. Unlike many other products, Avalon MultiChannel Systems loudspeakers are designed to be used with the grilles in place while listening, and removing them will degrade the system's performance. It is extremely important that the felt anti-diffraction masks make physical contact with the face of the loudspeakers, as air space between the felt and the speaker face will adversely affect sound quality.

#### Speaker Placement and Symmetry

Selecting the proper room position for your Avalon MultiChannel Systems loudspeakers can dramatically improve their performance. The following points highlight the fundamental concepts in loudspeaker positioning:

- Left to right room symmetry aids in producing a balanced sound stage.
- Image depth is enhanced when the distance to the rear wall is increased.
- The most even bass response will be attained when the distances to the side and rear walls are not overly similar.

The Avalon MultiChannel System SYMBOL, being designed for maximum resolution, is intentionally not shielded. Therefore care must be exercised when placing the loudspeakers in close proximity to a direct view television. Generally allowing a minimum clearance of 30" will not only eliminate any magnetic interference, but will also improve sonics by minimizing hard reflections from the television surface. If your system configuration does not allow these minimum clearances, shielded drivers are available as an option. Please contact your dealer for details.

#### Toe-In

Adjusting the toe-in angle of the speakers is useful in tailoring the sound to best match the characteristics of your system and listening room. When the speakers are facing straight forward, they tend to create a large, expansive sound-stage, painted with broad brush strokes. As they are rotated toward the listening position, the image becomes more compact, with increased focus, creating a greater sense of intimacy.

Start with the loudspeakers facing straight forward, and play either a mono source, or a stereo source with a distinct center image, through both channels. Carefully rotate the loudspeakers inward in small increments to bring the image in precise center focus. Toe-in adjustment is rather delicate, and experimentation is necessary to achieve the proper angle for your listening situation. The optimum angle is usually between three and ten degrees inward.

#### Mounting Feet Spikes

Supplied with your Avalon MultiChannel Systems loudspeakers are eight mounting feet with spikes, used to couple the speakers to the floor, thereby minimizing time-smearing resonance effects. The result is an increase in focus and solidity of the sonic images.

On hardwood floors, you may protect the floor from the pointed spike using a large coin, such as a quarter. However, the coupling effect of the spikes will be reduced.

Once you have located the proper position and toe-in angle for your Avalon MultiChannel Systems loudspeakers, install the spikes in the mounting feet (see section 2.2 Installing the Mounting Feet Spikes on page 6.

#### First Reflection Points

Since the ear/brain system tends to integrate the sounds arriving within a 10-millisecond time window, it is important to control the early reflections arriving from the sidewalls to the listening position. A hard-surfaced wall can produce a strong frequency-dependent reflection that can interfere with the reproduced sound-stage, as well as change the perceived tonal balance of the system. Therefore, damping these first reflection points is strongly recommended.

#### **Corner Treatment**

It is important to control the first reflections of low frequency sound, which normally occur at the corners behind the loudspeakers. These reflections can cause significant distortions in phase and amplitude, resulting in muddy bass definition and smeared bass transients. Placing DAAD Bass Traps, (more information is available at <u>www.acusticaapplicata.com</u>) in the room corners can significantly control these bass colorations and restore the quickness of bass transients.

### 6 Care of Your Loudspeakers

#### Cabinet (Hardwood Finish)

Avalon MultiChannel Systems' hardwood finished loudspeakers are supplied with a durable, high quality furniture lacquer. Always use a clean, lint-free cloth to clean your cabinet, and be especially careful near the loudspeaker drivers, so as not to damage the diaphragms.

IMPORTANT: DO NOT use cleaners that contain ammonia, strong solvents, or abrasive materials. Use of these materials can degrade, scratch, or even DESTROY the finish.

#### G Grille Assembly

The grille assembly may be removed from the cabinet and gently vacuumed to remove dust. If the felt insert is removed, please note the inside-outside orientation when re-installing it. The hole for the tweeter is beveled on the side toward the listener, to provide optimal dispersion characteristics.

#### Drivers

The drivers (woofers and tweeter) require no regular maintenance. Do not attempt to clean the tweeter domes, as they are easily damaged. If desired, you may remove dust from the woofer cone by using a small, soft dusting brush.

### 7 Warranty

Your Avalon MultiChannel Systems SYMBOL SERIES loudspeakers are warranted against defects in workmanship and materials for a period of two years from the date of first purchase to the original registered purchaser, provided that the enclosed registration card is returned to the factory within seven days of the purchase date. If the registration card is not returned within the seven-day period, this warranty is null and void, and you will not be notified of future updates. If you did not receive the registration card with your loudspeakers, please contact the factory immediately so that we may send you a replacement card. A complete statement of warranty is given below. Please take the time to fill out and return the enclosed warranty registration card.

#### In the Event of a Problem

In the unlikely event of a problem with your Avalon MultiChannel Systems loudspeakers, have your dealer contact Avalon MultiChannel Systems. <u>All warranty claims must be</u> made through an authorized Avalon MultiChannel Systems dealer or distributor.

#### Warranty Statement

1. Avalon MultiChannel Systems warrants the materials, workmanship, and proper functioning of this product for a period of two years from the date of first purchase to the original registered purchaser, provided that the completed registration card is returned to Avalon MultiChannel Systems within seven days of the date of purchase. If the registration card is not returned to the factory within the seven-day period, this warranty is null and void. If any defects are found in the materials or workmanship of this Avalon MultiChannel Systems product, or if the product ceases to properly function within the appropriate warranty period from the date of first purchase, the unit will be repaired or replaced by Avalon MultiChannel Systems or its authorized agent after receiving authorization from the factory or dealer. This warranty is not transferable.

Unauthorized dismantling of this product will render this warranty void.

2. Purchaser must obtain an RMA number by contacting dealer/distributor and return the product, packaged in the original shipping carton, freight prepaid. Shipping address will be provided at the time the RMA number is issued. No returns will be accepted without prior authorization. 3. Avalon MultiChannel Systems reserves the right to inspect any products which are the subject of warranty claim prior to repair or replacement. Final determination of warranty coverage lies solely with Avalon MultiChannel Systems and only products which are determined to be covered under this warranty shall be repaired or replaced by Avalon MultiChannel Systems. The customer will be informed of any delays and Avalon MultiChannel Systems will provide replacement as quickly as possible. Out-of-warranty claims will be billed for labor, materials, return freight, and insurance as required. Any product for which a warranty claim is accepted will be returned to the purchaser and cost of return shipping and insurance will be factory prepaid within the boundaries of the USA. Units to be shipped outside of the USA will be shipped freight collect only. This warranty gives specific legal rights. The purchaser also has implied warranty rights, and may also have other rights which vary from state to state.

4. This warranty is extended to the original registered purchaser for value.

5. Avalon MultiChannel Systems strives to manufacture the very finest possible equipment, and therefore reserves the right to make changes in design and improvements upon its products, without necessarily assuming an obligation to retrofit such changes upon its previously manufactured models.

6. The above warranty is the sole warranty given by Avalon MultiChannel Systems, and is in lieu of all other warranties. All implied warranties, including warranties of merchantability or fitness for any particular purpose shall be strictly limited in duration to two years from the date of original purchase, and upon the expiration of the warranty period (two years), Avalon MultiChannel Systems shall have no further obligation of any kind whether express or implied, including but not limited to merchantability. Further, Avalon MultiChannel Systems shall in no event be obligated for any incidental or consequential damages as a result of any defect or any warranty claim, whether express or implied. Some states do not allow exclusion or limitation of incidental or consequential damages or limitations on how long implied warranties last, so the above limitations and exclusions may not apply to you.

7. Avalon MultiChannel Systems does not authorize any third party, including any dealer or sales representative to assume any liability for Avalon MultiChannel Systems, or make any warranty for Avalon MultiChannel Systems. The unit must not have been altered or improperly serviced or repaired. The serial number on the unit must not have been altered or removed.

8. Warranty registration cards must be completed and mailed to Avalon MultiChannel Systems within seven days of date of purchase; otherwise, this warranty is null and void. Avalon MultiChannel Systems may, at its option, require from the purchaser valid proof of purchase.

9. If this product is used in a commercial or industrial application, then special warranty exclusions may apply. Contact your dealer or Avalon MultiChannel Systems for commercial warranty policies.

### 10 Features

- Advanced light weight driver diaphragm materials minimize energy storage and time-domain distortion.
- Smooth, wide polar response for superlative imaging capabilities.
- Moderate impedance characteristic allows for ideal interface with any amplifier.
- Crossover circuitry is hard-wired with surface-only conductors, eliminating deleterious sonic effects of printed-circuit boards.
- Oversize screw terminals.
- Careful crossover control of all magnetic field interaction.
- Acoustically-engineered grille assembly decreases edge diffraction effects.
- Distinctive pyramidal cabinet design provides optimal polar characteristics.

## **11 Specifications**

Driver Complement	<ol> <li>(1) 1" Proprietary Composite Tweeter</li> <li>(2) 5.25" Ceramic-coated Woofer</li> </ol>	
Sensitivity	87 dB	
Impedance	5 Ohms Nominal	
Frequency Response	45Hz to 24kHz	
Recommended Amplifier Power	30 to 150 Watts	
Wiring Methods	Two position terminal block, designed to accept spade lugs for #10 screws	
Dimensions	42" High (109 cm) 8" Wide (13 cm) 9" Deep (23 cm)	
Weight	36 Pounds Each (16.4 kg each)	

# 12 Notes